

IN THE CLAIMS:

The following listing replaces all prior versions of the claims:

1. (Withdrawn) A method for inducing apoptosis in cells, said method comprising the step of exposing one or more cells to a cytotoxic agent for a sufficient time and at a sufficient temperature to induce apoptosis of said one or more cells, said cytotoxic agent consisting of a targeting moiety and an avidin moiety wherein said targeting moiety is capable of binding to one or more of said cells.
2. (Withdrawn) A method for inducing apoptosis in cells according to claim 1 wherein said cells are liquid or solid tumor cells
3. (Withdrawn) A method for inducing apoptosis in cells according to claim 2 wherein said liquid or solid tumor cells are cancerous.
4. (Withdrawn) A method for inducing apoptosis according to claim 1 wherein said targeting moiety binds to a cell surface protein or carbohydrate.
5. (Withdrawn) A method for inducing apoptosis in cells according to claim 1 wherein said targeting moiety is capable of binding to one or more growth factor receptors located on said cells.
6. (Withdrawn) A method for inducing apoptosis in cells according to claim 1 wherein said cells are in vivo.
7. (Withdrawn) A method for inducing apoptosis in cell according to claim 1 wherein said cells are in vitro.
8. (Withdrawn) A method for inducing apoptosis in cells according to claim 1 wherein said targeting moiety comprises an antibody, antibody fragment, scFv or a ligand.
9. (Withdrawn) A method for inducing apoptosis in cells according to claim 1 wherein

said avidin moiety comprises molecules selected from the group consisting of avidin and avidin analogues.

10. (Withdrawn) A method for inducing apoptosis in cells according to claim 8 wherein said avidin moiety comprises two molecules selected from the group consisting of avidin and avidin analogues.

11. (Withdrawn) A method for inducing apoptosis according to claim 1 wherein said cytotoxic agent is a fusion protein.

12. (Withdrawn) A method for inhibiting the proliferation of a proliferating cell population, said method comprising the step of exposing said cell population to a cytotoxic agent for a sufficient time and at a sufficient temperature to inhibit proliferation of said proliferating cell population, said cytotoxic agent consisting of a targeting moiety and an avidin moiety wherein said targeting moiety is capable of binding to one or more of said cells.

13. (Withdrawn) A method for inhibiting the proliferation of a cell population according to claim 12 wherein said cell population comprises liquid or solid tumor cells.

14. (Withdrawn) A method for inhibiting the proliferation of a cell population according to claim 13 wherein said liquid or solid tumor cells are cancerous.

15. (Withdrawn) A method for inhibiting proliferation of a cell population according to claim 12 wherein said targeting moiety binds to a cell surface protein or carbohydrate.

16. (Withdrawn) A method for inhibiting the proliferation of a cell population according to claim 12 wherein said targeting moiety is capable of binding to one or more growth factor receptors located on said cells.

17. (Withdrawn) A method for inhibiting the proliferation of a cell population according

to claim 12 wherein said cell population is in vivo.

18. (Withdrawn) A method for inhibiting the proliferation of a cell population according to claim 12 wherein said cell population is in vitro.

19. (Withdrawn) A method for inhibiting the proliferation of a cell population according to claim 12 wherein said targeting moiety comprises an antibody, antibody fragment, scFv or a ligand.

20. (Withdrawn) A method for inhibiting the proliferation of a cell population according to claim 12 wherein said avidin moiety comprises molecules selected from the group consisting of avidin and avidin analogues.

21. (Withdrawn) A method for inhibiting the proliferation of a cell population according to claim 12 wherein said avidin moiety comprises two molecules selected from the group consisting of avidin and avidin analogues.

22. (Withdrawn) A method for inhibiting the proliferation of a cell population according to claim 12 wherein said cytotoxic agent is a fusion protein.

23. (Original) A composition for use in treating cells to induce apoptosis and/or inhibit cell proliferation wherein said cells include cell surface proteins or carbohydrates, said composition comprising: a cytotoxic agent consisting of a targeting moiety and an avidin moiety wherein said targeting moiety is capable of binding to one or more of said cell surface proteins or carbohydrates; and a pharmaceutically acceptable carrier.

24. (Original) A composition for use in treating cells to induce apoptosis and/or inhibit cell proliferation according to claim 23 wherein said targeting moiety comprises an antibody, antibody fragment, scFv or ligand.

25. (Original) A composition for use in treating cells to induce apoptosis and/or inhibit

cell proliferation according to claim 23 wherein said avidin moiety comprises molecules selected from the group consisting of avidin and avidin analogues.

26. (Original) A composition for use in treating cells to induce apoptosis and/or inhibit cell proliferation according to claim 23 wherein said cell surface protein or carbohydrate is a growth factor receptor.

27. (Original) A composition for use in treating cells to induce apoptosis and/or inhibit cell proliferation according to claim 24 wherein said antibody is an anti-transferrin receptor antibody.

28. (Original) A composition for use in treating cells to induce apoptosis and/or inhibits cell proliferation according to claim 23 wherein said targeting moiety is a fusion protein.

29. (New) A composition for use in treating cells to induce apoptosis and/or inhibits cell proliferation according to claim 23 wherein said targeting moiety is a chemical conjugate.

30. (New) A composition for use in treating cells to induce apoptosis and/or inhibit cell proliferation according to claim 23 wherein said avidin moiety is selected from the group consisting of avidin, streptavidin, neutra-avidin, lite-avidin, and neutra-lite avidin.